Poster II-38

Infrastructure for Communal Biomedical Informatics

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caCORE is a synthesis of open source technologies and bioinformatics workflows that supports data management, access and semantic standardization for genomic and clinical research. Cancer Bioinformatics Infrastructure Objects (caBIO) provide an integrated UML model with a Java Bean-based implementation. The NCI Enterprise Vocabulary Services (EVS) provide controlled vocabularies, thesauri and ontologies that link the diversity of terminology found in the object data. The Cancer Data Standards Repository (caDSR) provides an ISO/IEC 11179-compliant metadata management system for NCI research data standards. The architecture offers Java, SOAP-XML, and HTTP-XML programming interfaces. These technologies offer a broad framework for managing, integrating, accessing and analyzing a variety of biomedical information. caCORE powers applications such as the Cancer Molecular Analysis Project (http://cmap.nci.nih.gov), Cancer Models Database (http://cancermodels.nci.nih.gov), and Gene Expression Data Portal (http://gedp.nci.nih.gov). BIOgopher is an advanced web application that provides a flexible interface for integrating desktop spreadsheets with the vast stores in caCORE (http://biogopher.nci.nih.gov). caCORE is available at http://ncicb.nci.nih.gov/core.